

TXB1800 Series X-ray Source

50kV,4W,X-ray Monoblock



Teslaman TXB1800 series x-ray monoblock is a fully integrated miniature 50 kV,4W x-ray generator designed specifically to be used as component of a handheld,portable,or benchtop x-ray instrument.

The source includes a miniature sealed x-ray tube with a transmission-type end window,a high voltage power supply,and control electronics contained in a compact grounded enclosure.

- Compact design – ideal for handheld,portable and benchtop instruments
- Low power consumption – compatible with battery operation
- Easy to operate – analog control interface
- Integrated design – no high voltage cables
- Machined metal enclosure – precision mounting and alignment
- Patented X-ray Omnishield™ – 360 degree light weight radiation shielding
- Wide cone angle – 110 degree full width x-ray cone angle
- Threaded adapter for collimated applications – optional

Typical Application:

XRF Materials Analysis

- Alloy and metal sorting
- ROHS and ELV compliance
- Environmental analysis
- Forensic science
- Mining and geology
- Art and archeology
- Coating thickness
- Lead detection
- Quality control
- Precious metal verification

X-ray Imaging

- Medical,dental,small animal
- NDT
- Security,contraband

Specifications:

Input: 5-12VDC

Output: Customize from 5kV to 50kV,maximum power 4W.

Cathode Type: Tungsten filament

X-ray window: Be,125μm

Target Type: Transmission

Available Targets: Au,Ag,Rh,W

Depth to focal spot: 2.4mm

X-ray cone Angle: 110°

HV polarity: Grounded anode

Stability: Less than 0.1% every 8 hours after half hour warm-up.

Electrical Insulation: Silicone potting

Radiation Shielding: Self-shielded

Environmental:

Operational: -10°C to +50°C. **Storage:** -25°C to +85°C.

Cooling: Air cooled

Humidity: 90% max(non-condensing)

Weight: about 365g.

Analog Interface:

PIN	Description
1	V+
2	V+
3	GND
4	GND
5	Tube I Control
6	Tube HV Control
7	Tube Ready
8	Tube Enable
9	Tube HV Monitor
10	Tube I Monitor

Dimensions: mm

